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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,262	11/02/2001	David Walter Edmunds	1028-004US01	4492

7590 05/26/2005

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EXAMINER
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NGUYEN, CINDY

ART UNIT	PAPER NUMBER
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2161

DATE MAILED: 05/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/016,262

Applicant(s)

EDMUNDS ET AL.

Examiner

Cindy Nguyen

Art Unit

2171

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

This is in response to communication filed 03/25/05.

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/25/05 has been entered.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by the

<http://web.archive.org/web/20011018140152/http://www.kem.ae.poznan.pl/Books/Excel->

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[Solver/T1/T1.htm](#)( University of British Columbia's MBA program online tutorial for the Solver, "A Tutorial on Spreadsheet Optimization" on 01/18/01 (Tutorial).

Regarding claims 1, 3 and 4, Tutorial discloses: a method, a system and a computer program product for the calculation and back-solving of complex relationships in a sub-cube of a multidimensional database system comprising the steps of:

inputting from a user for at least one specified cell a required value, or the required value and one or more constraints, the required value and the constraints being taken into account in calculation (page 1 and page 13-14);

wherein more than one calculation may affect a cell, selecting a calculation for the affected cell in accordance with a set of prioritisation rules (section "using the solver Dialogs on page 14);

creating one or more parent/child tables giving the relationships and dependencies between target cells and other cells in the sub-cube (page 13;

determining from the one or more parent/child tables the one or more target cells requiring a back-solving calculations to set a value of the specified cell to the required value (page 14-16);

for each target cell requiring back-solving calculations:

performing the one or more back-solving calculations and recording that a change has taken place (page 13-17);

for each targets cell:

remembering the one or more parent cells of the target cell to ensure they are recalculated (page 13-17);

recalculating the values for each remembered parent cell and recording that a change has taken place (page 13-17);

repeating the performing, remembering, and recalculating steps until all changes to the target cells and their parent cells are complete (page 13-17);

repeating the performing, remembering, recalculating, and first repeating steps until no changes are recorded (page 13-17); and

reporting the results of the foregoing steps to the user (page 13-17).

Regarding claim 2, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Tutorial discloses: wherein the Parent/Child table creating step is carried out as part of the performing the backsolving calculation step, thereby reducing a number of access times to access a particular cell in smaller, less complex sub-cubes (page 13).

Regarding claim 5, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Shad discloses: wherein the step b) includes the step of accepting from a user an adjustment to the prioritization rules (page 15).

Regarding claim 6, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Shad discloses: including after step b) the step of b1) checking the sub cube for consistency (page 32).

## **1. Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bakalash et al. (U.S 6385604). Relational database management system having integrated non-relational multi-dimensional data store of aggregated data elements.

Ravid et al. (U.S 6622137). System and method for business decision implementation in a billing environment using decision operation trees.

## **2. Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cindy Nguyen whose telephone number is 703-305-4698. The examiner can normally be reached on M-F: 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



Cindy Nguyen  
May 20, 2005

  
**FRANTZ COBY**  
**PRIMARY EXAMINER**